

Appl. No. 09/696,491
Amdt. dated December 2, 2003
Reply to Office Action of October 3, 2003

REMARKS

In the Office Action dated October 3, 2003, claims 2, 4, 7-18 and 30-36 were rejected under 35 U.S.C. § 103 over WO 98/36508 (Hamalainen) in view of U.S. Patent No. 5,727,033 (Weaver); claim 6 was rejected under § 103 over Hamalainen in view of Weaver and U.S. Patent No. 6,208,699 (Chen); claim 19 was rejected under § 103 over Hamalainen in view of Weaver and alleged "admitted prior art"; claim 3 was rejected under § 103 over Hamalainen in view of Weaver and U.S. Patent No. 5,933,781 (Willenegger); claims 20-22 and 26 were rejected under § 103 Hamalainen in view of Willenegger; claim 28 was rejected under § 103 over Hamalainen in view of Willenegger and Weaver; claim 23 was rejected under § 103 over Hamalainen in view of Willenegger and Chen; and claim 24 was rejected under § 103 over Hamalainen in view of Willenegger and alleged "admitted prior art."

The hypothetical combination of Hamalainen and Weaver fails to teach or suggest the invention of independent claim 4. Claim 4 recites detecting an error in control signaling transmitted over a link between a base station and a mobile unit when traffic channels are not being communicated. The Office Action cited to page 7, lines 3-7, the Abstract, and Figures 1-3 of Hamalainen as teaching the detecting act of claim 1. Page 7 of Hamalainen, at lines 3-7, refers to a personal station not sending any information in the reverse channel during DTX state. The Abstract of Hamalainen describes lowering the frequency of power control commands or changing the energy of power control bits in response to detecting that traffic has become slower in a given direction (due to a DTX state, a slower transfer rate, asymmetric data transfer or for any other reason). There is nothing in any of the cited passages that suggests detecting an error in control signaling transmitted over a link between the base station and the mobile unit when traffic channels are not being communicated. In fact, nowhere within Hamalainen is there any teaching of detecting for errors in *control signaling*.

Nor is there any teaching or suggestion anywhere within Hamalainen of adjusting a power control element based on the detect error *in the control signaling*. The Office Action cited to the Abstract and page 9, lines 23-33, as teaching the adjusting act of claim

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4. What the cited passages describe is either changing the frequency of power control commands, or reducing the energy of such power control commands, in response to detecting a reduced data transfer rate in a given direction. There is absolutely no suggestion in the cited passages, or anywhere else in Hamalainen, of adjusting a power control element based on detected error *in control signaling*.

Because the obviousness rejection is based on this erroneous application of Hamalainen to elements of claim 4, a *prima facie* case of obviousness has not been established with respect to claim 4 for at least this reason.

Moreover, Weaver also fails to teach or suggest any of the elements of claim 4. The Office Action asserted that Weaver discloses "adjusting the power control element comprises adjusting a ratio of energy per bit to noise spectral density based on the detected error of voice data and reverse link (*see col. 3, lines 45-65 and col. 4, lines 29-33*)." 10/3/03 Office Action at 2. The Office Action then proceeded to cite to Applicant's disclosure of the invention to support the assertion that Weaver teaches the adjusting act recited in claim 4.

The use of Applicant's disclosure of the invention is improper. It is apparent that there is nothing within Weaver to even remotely suggest the elements of the claim. Rather than find objective proof in prior art references to support the allegation of obviousness, the Office Action is using Applicant's description of some embodiments of the invention in an attempt to modify Weaver to support the obviousness rejection. Applicant's description of some embodiments of the invention is not a proper source of prior art--therefore, the obviousness rejection is improper and should be withdrawn.

Moreover, Weaver fails to disclose adjusting a target ratio of energy per bit to noise spectral density *based on detected error in control signaling*. Weaver expressly teaches an inner control loop that detects the E_b/N_o of propagated *voice data* and adjusts the power output level of a reverse link transmitter 102 to increase or decrease the E_b/N_o of propagated voice data to match the E_b/N_o target 214. Thus, the E_b/N_o adjustment taught by Weaver is based on *voice data*, not *control signaling*. *See Weaver, 3:46-48*. Weaver is absolutely silent on adjusting a target E_b/N_o based on detected error in control signaling.

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Because the hypothetical combination of Hamalainen and Weaver clearly does not teach or suggest any of the elements of claim 4, a *prima facie* case of obviousness has not been established with respect to claim 4. Withdrawal of the rejection is respectfully requested.¹

With respect to independent claim 30, there is no teaching or suggestion anywhere within Hamalainen or Weaver of detecting for one or more errors in control signaling received over a link, and adjusting a power control element based on the detected one or more errors in the control signaling if the mobile unit is in a discontinuous transmission mode.

Similarly, with respect to independent claim 33, there is no teaching or suggestion by either Hamalainen or Weaver of monitoring for one or more errors in receiving predetermined pilot signal information when traffic signaling is not being transmitted, and adjusting a target ratio of energy per bit to noise spectral density based on the monitored one or more errors in the predetermined pilot signal information.

Independent claim 20 was rejected over the asserted combination of Hamalainen and Willenegger. This obviousness rejection is also defective. As noted above, Hamalainen does not disclose detecting for error in received control signaling and adjusting a power control condition based on a detected error in the received control signaling in response to detecting that the mobile unit is in a discontinuous transmission mode. Because of this defective application of Hamalainen to claim elements, a *prima facie* case of obviousness has not been established with respect to the claim for at least this reason.

Moreover, contrary to the assertion in the Office Action, Willenegger does not disclose detecting for error in traffic signaling from a mobile unit and to adjust a power control condition based on detected error in the traffic signaling in response to the detecting that a mobile unit is not in discontinuous transmission mode. Willenegger actually teaches away from this feature, as it states that the power control command 121 is based on the energy of a pilot channel, *rather than the traffic channel*. Willenegger,

¹ The Office Action has also failed to establish that there is any motivation or suggestion to combine the teachings of Hamalainen and Weaver.

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6:17-18. Willenegger states that a more accurate power control command is generated in this way because the pilot channel is transmitted with a relatively constant or slow changing transmit power. Willenegger, 6:17-20. Thus, Willenegger teaches that generating a power control command based on a traffic channel is *not desirable*. Therefore, Willenegger teaches away from this aspect of claim 20, and thus no motivation or suggestion to combine Willenegger and Hamalainen exists.

Also, Willenegger fails to disclose or suggest detecting whether a mobile unit is or is not in discontinuous transmission mode. Therefore, it is impossible for Willenegger to adjust the power control condition based on detected error in the traffic signaling in response to *detecting that the mobile unit is not in the discontinuous transmission mode*.

In view of the foregoing, it is respectfully submitted that a *prima facie* case of obviousness has not been established with respect to claim 20.

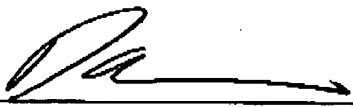
Several other combinations of references have been asserted against some of the dependent claims. Such other rejections have either been rendered moot or have been overcome by the amendments and arguments presented in this Reply. Applicant specifically notes that Applicant does not admit that the other combinations of references to reject claims under 35 U.S.C. § 103 are proper. Applicant reserves the right to argue that the asserted combinations of references are improper, should such combinations be repeated in a future Office Action.

In view of the foregoing, all claims are in condition for allowance, which action is respectfully requested. The Commissioner is authorized to charge any additional fees and/or credit any overpayment to Deposit Account No. 20-1504 (NRT.0031US).

Respectfully submitted,

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Date


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